

IN THE SPECIFICATION

Applicant has followed the Examiner's suggestion and sought the assistance of an Agent qualified before the USPTO.

The subject matter as set forth in the specification currently on file has been completely reformatted per the outline provided by the Examiner, the guidelines for which are set forth in the MPEP.

Please replace the entire written portion of the specification in its entirety with the enclosed amended specification.

In accordance with 37 CFR 1.125, an entire clean specification is attached hereto. As required under 1.125, Applicant has:

- Provided a clean specification,
- Provided a markup version, however it is somewhat arbitrary due to little common formatting to render a meaningful markup, and
- States that Applicant believes that no new matter was added in the amendment, the materials and terminology being supported by the specification as originally filed and the drawings as originally file and as filed Feb. 10, 2003.

So as to assist the Examiner, a table of concordance is provided as a means to confirm adherence to a requirement to add no new matter and compare terminology.

Disclosure:

The following invention relates to a clip or tool of different model types which are specifically designed for the construction industry.

Background of the invention:

In the construction industry any time something is required to be fastened (temporarily or permanently) to a wood or metal stud (or any vertical building member) the trades person is not only required to hold the item to fasten it accurately in place but also use a hammer or drill as well as nails or screws.

Through the creation of "Stud Clips" we achieve greater work efficiency while at the same time providing a higher level of safety and convenience as reducing long-term physical wear and tear of the worker.

Example #1: When an electrician is mounting wire splices he has to drive in and bend 3 1/4 - 3 1/2" spikes around a pull bar (minimum 4, as many as 8-10 spikes) to securely fasten the roll bar to a wood stud (with as many as 4,40-5 lb rolls of wire mounted on the bar). In the case of a steel stud the difficulties arise through holes in the metal that do not line up or steel studs that remain perpendicular twisted after having a roll bar forced through them to support wire.

Stud Clip "Reel Hooks" (RH01) twist holds into place in a fraction of the time required to drive in and bend nails and removes the risk of having a nail bend out of place when heavy rolls are lifted into place. Also removed with greater ease therefore reducing physical wear and tear of the worker.

Example #2: In the case of the plumber when installing water lines their material is provided in a large coil in which the plumber unrolls around their work area or lays horizontally over a coil dispersing spool (which takes up working area and doesn't positively hold the coil of waterline in place while the worker pulls against it).

Stud Clip "Coil Rollers" (CR01) first of all is a fraction of the weight of a horizontal spool. They take far less room when stored in the vehicle, provide more work area for not only the water line installer but other workers in the area and provides a solid anchor from which to pull against thereby not only reducing set up time, installation time, dismantle and storage time but increases safety through less floor clutter and eliminates the need of second worker to keep the coil from tangling. As an added bonus "Coil Rollers" also provide the plumber with a proper height holder for cutting drain pipes thereby reducing lower back wear and tear.

Disclosure 2

Stud Clip "Work Bench" (WB01) provides a solid, lightweight "Work Bench" to allow the worker a proper area to spread out blueprints, set up power miter saw, assemble material, repair tools or simply set up the radio and the coffee pot.

Stud Clip "Scaffold Bracket" (SB01) In the case of the framing carpenter Stud Clip provides a fast and reliable method of setting up scaffolds. Eliminate the need to drive nails and saves time, wear and tear when taking the scaffold apart.

Yours truly,

dean

"Stud Clips"
Specification

Material:

Non-corrosive aluminum plate.

Size:

Variable pending application.

Method of production:

Stud Clips and its various models are produced by:

- 1) Mapping out required shapes and sizes on a 4'x7' sheet of aluminum (minimum 1/8" thickness and larger pending strength sizes required) paying particular attention to minimizing waste of material and time.
- 2) All pieces are cut to shape using a metal sheer.
- 3) Shapes are then stamped or drilled as to provide the necessary definition required but not achieved in step two to make ready for bending.
- 4) Refined shapes are then bent by way of a Sheet Brake to achieve the Final shape which is ready for use.
- 5) As described in the Abstract of the Disclosure, "Stud Clip" and associated models slide horizontally and across one's stud or Vertical Building Member and is then twisted forward to the 45 degree position which holds the tool in place via the side body, two side flaps and two end flaps as well as forward and or rear anchor teeth (pending model).

List of Drawings and Model numbers

Drawing:

Model RH01-

Showing:

The lay out of the Reel Hook perpendicular to the stud or Vertical Building Member and the layout of the Reel Hook in the clipped on position.

Model RH02-

Side view showing the Reel Hook supporting the Wire Reel or Roll Bar.

Model RH03-

Facing view of the Reel Hooks supporting the Wire Reel on a Roll Bar.

Model CR01-

Shows layout of the Coil Roller and how it sits relative to the stud or Vertical Building Member.

Drawing:

Model CR02-

Showing:

Shows the Coil Roller locked in place complete with roller wheels to accommodate water line coils.

Model CR03-

Shows opposing Coil Rollers. Top Coil Roller carries the weight and the bottom Roller helps hold the water line in place.

Model SB01-

Shows a side view layout of the Scaffold Bracket.

Model WB01-

Shows a facing view of the Stud Top "Work Bench".

reject

1 **"SUPPORT BRACKET FOR SUSPENDING OBJECTS
2 FROM A STUD OR THE LIKE"**

3

4 FIELD OF THE INVENTION

5 This invention relates to the field of support brackets and more
6 particularly to a one-piece support bracket which can be removably attached to a
7 building stud or other substantially vertical member for supporting objects therefrom,
8 and when two such brackets are employed, the device can be used to support
9 objects therebetween.

10

11. BACKGROUND OF THE INVENTION

12 Applicant is not aware of a one-piece bracket which is removably
13 attachable to building studs or other vertical members and which can support
14 objects. A system of multiple brackets and rods is known to be removably
15 attachable to building studs through the supplemental use of fasteners and capable
16 of supporting sheets of building material, as shown in US 6,293,058 to Sink. A
17 bracket arrangement, consisting of two interconnectable bracket members, is
18 known for mounting pipe or the like to a support member using spring clips and
19 fasteners, as shown in US 3,536,281 to Meehan et al.

20

1

SUMMARY OF THE INVENTION

2 The support bracket of the invention provides a one-piece, easy to use
3 removably attachable bracket to support a variety of objects from a substantially
4 vertical member. No supplemental fasteners are required to adapt the bracket to
5 attach to the vertical member.

6 In a broad aspect, a load supporting bracket adapted for attaching to a
7 substantially vertical member such as a stud comprises: a side member having front
8 and rear ends; a front leg and a rear leg co-protruding from the front and rear ends
9 of the side member respectively and forming a first opening greater than a depth of
10 the stud therebetween; and a support member extending from the front end of the
11 side member and adapted for supporting a load, the bracket having an installation
12 position wherein the first opening is oriented for installation laterally onto the stud
13 and the bracket having an supporting position wherein the bracket is rotated to
14 lower the support member until the front leg engages the front face of the stud and
15 the rear leg engages the rear face of the stud. Preferably, the leg further comprises
16 anchors for engaging the stud and preventing movement therebetween.

17 Installation of the bracket is accomplished by initially orienting the
18 bracket in a manner wherein the side member is adjacent one side of the vertical
19 member and the pair of legs straddle the front and rear faces of the vertical member
20 respectively. The bracket is rotated for moving the leg members to an engaging
21 position with the front and rear faces of the vertical member. Optional anchors
22 engage the vertical member for retaining the bracket therewith for substantially
23 precluding movement therebetween.

1 In one embodiment the support means comprises a hook member. In
2 another embodiment the support means comprises an axle and a plurality of rollers
3 rollably mounted thereon. In a third embodiment the support means comprises an
4 elongate support plate.

5

6 BRIEF DESCRIPTION OF THE DRAWINGS

7 Figure 1 is a side view of one embodiment of the bracket of the
8 invention;

9 Figure 2 is a front view of the embodiment of Fig. 1;

10 Figure 3 is a rear view of the embodiment of Fig. 1;

11 Figures 4a and 4b are side views of the embodiment of Fig. 1 and
12 show the bracket in the installation position ready for installation on a stud and
13 rotated to the support position on a stud respectively;

14 Figures 5a and 5b are side views of the embodiment of Fig. 1, from
15 the opposite side as that in Figures 4a and 4b, and show the bracket in the
16 installation position ready for installation on a stud and rotated to the support
17 position on a stud respectively;

18 Figure 6a is a front view of the embodiment of Fig. 1 and shows the
19 bracket installed on a stud and supporting a rod such as that using with a reel of
20 material;

21 Figure 6b is a side view of an alternate embodiment of the bracket and
22 which shows the bracket supporting a reel rotatably mounted on a rod extending
23 between two brackets;

1 **Figure 7a is a side view of an alternate embodiment of the invention**

2 **Incorporating rollers on the support member;**

3 **Figure 7b is a side view of a pair of vertically spaced brackets of the**
4 **embodiment of Fig. 7a installed on a stud for supporting a coil of material;**

5 **Figure 8 is a front view of the embodiment of the invention illustrating**
6 **a reel rotatably mounted on a rod extending between two brackets;**

7 **Figure 9 is a front view of the embodiment of the invention illustrating**
8 **a work surface extending between two brackets.**

9

1 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

2 With reference to various embodiments shown in Figs. 6a - 9, a stud
3 clip or support bracket 10 is shown which is removeably attachable to a
4 substantially vertical member 12, such as a wood stud, metal stud or the like. An
5 extension or support member 24 protrudes from the front of the bracket 10 for
6 supporting or suspending an object 11 therefrom.

7 In Figs. 4a - 6b, the support bracket 10 can be seen to comprise a
8 side plate or side member 14 and a pair of front and back walls or legs 16, 18
9 extending substantially perpendicularly from the same side of the side member 14
10 and from front and rear ends of the side member 14 respectively. The support
11 member 24 extends from the front end of the side member 14.

12 The legs 16,18 are spaced, forming a first opening 20 which is sized
13 to permit positioning of the bracket 10 laterally over the depth of the vertical support
14 member 12 when oriented in an installation position (Fig. 4a,5a). Once positioned,
15 the bracket 10 is rotated to a supporting position (Figs. 4b,5b) for moving the leg
16 members 16, 18 into a load supporting and engaging position with the front and rear
17 faces of the vertical member 12. Support means or support member 24 is provided
18 for supporting or suspending the object 11. Weight of the support member
19 extending from the bracket 10, and additional weight of the object 11 cause the
20 bracket to rotate pressing leg 16 into the front face stud, and pulling leg 18 into the
21 back face of the stud. Typically friction ensures that the bracket 10 does not slide
22 down the stud.

1 In Figs. 4a-5b, support member 24 is depicted as a hook member 24a
2 which projects outwardly and downwardly at a substantially 45 degree angle
3 downward from the vertical member 12. Thus, an object 11 to be supported or
4 suspended from the vertical member 12 may be engaged on the hook member 24a,
5 the legs 16,18 supporting the bracket and object supported thereon from the vertical
6 member 12. In Figs. 7a, 7b and 9, the support member 24 extends substantially
7 horizontally from the side member 14 for supporting a variety of different objects 11
8 as described later.

9 When it is desired to remove the bracket 10, it may be easily
10 disengaged from the vertical member 12 by rotating the bracket 10 from the
11 supporting position in a direction opposite that of installation for enabling releasing
12 the bracket laterally from the vertical member 12.

13 As stated, load on the support member 24 and friction between the
14 legs 16,18 and vertical member 12 is generally sufficient to support the bracket 10
15 from movement thereon. Preferably, there is additionally provided front, side or
16 back anchor teeth 22 which bite or engage with the vertical member 12 for more
17 securely retaining the bracket 10 thereon and substantially precluding accidental
18 disengagement therebetween. The anchor teeth 22 may be easily disengaged from
19 the vertical member 12 by rotating the bracket 10 in a direction opposite that of
20 installation.

21 Preferably the bracket 10 is constructed of non-corrosive aluminum
22 plate with a thickness of 1/8th of an inch or greater. Alternatively the bracket 10 may
23 be constructed of a suitable plastic.

1 As stated, a variety of objects 11 can now be supported from the
2 bracket 10 including reels 30 of materials like wire and tubing, or work surfaces 40.

3 With reference to Figs. 1 – 6b and 10, a preferred embodiment of the
4 bracket 10 is shown as adapted for supporting objects 11 such as reels or spools
5 30. The vertical member 10 is referred to as a stud for simplicity however it is not to
6 be limiting. In this embodiment, the support bracket 10 comprises a substantially
7 planar side member 14 of substantially parallelogram shape. The pair of legs 16,
8 18 are L-shaped comprising a transverse member 16a, 18a respectively and, for
9 greater stability, tabs 16b, 18b respectively. The transverse members 16a, 18a co-
10 protrude substantially perpendicularly and from the same side of the side member
11 14. The tabs 16b, 18b project generally towards each other from the transverse
12 members 16a, 18a at substantially right angles and over the opening 20 and
13 therefore are substantially parallel to the side member 14. The tabs 16b, 18b have a
14 limited length and form a smaller second opening 21.

15 In the preferred embodiment the transverse members 16a, 18a are
16 substantially parallelogram-shaped, the tabs 16b, 18b are substantially triangular in
17 shape. The tabs 16b, 18b are off-set from each other along the planar axis of the
18 side member 14 and positioned at diametrically opposite corners relative to the side
19 member 14. The support member 24 in this embodiment comprises a hook
20 member 24a extending from the plate 14.

21 As shown in Fig. 6a, advantageously, to provide increased stability,
22 the minimum distance between the side member 14 and tabs 16b, 18b is only
23 slightly greater than the width of the vertical member 12 or stud.

1 With reference to Figs. 4a,5b, the bracket 10 of this embodiment is
2 initially oriented with the opening 20 adjacent one side of the stud and inserted
3 thereover. The bracket is rotated to engage the leg members 16,18 with the front
4 and rear faces of the stud with the support member 24 extending forward.

5 Advantageously, a pair of brackets 10 may be installed on spaced
6 apart such as on adjacent studs 12. A object 11 such as a axle rod 11a may be
7 supported on the hooks 24a of the pair of brackets 10. A reel or spool 30 of
8 electrical wire or plumbing tubing can be rollably mounted on the rod 11a and so as
9 to facilitate the dispensing of electrical wire from the spool.

10 Referring now to Figs. 7a and 7b, a second roller embodiment of the
11 bracket 10 is illustrated adapted for forming enabling dispensing of coils or providing
12 a roller work surface for enabling substantially frictionless transverse motion. In this
13 embodiment the support member 24 comprises an arm or substantially planar
14 mounting extension 24b extending from the side member 14. The extension 24b is
15 "U"-shaped and supports a plurality of rollers 24c mounted on an axle 24d.
16 Preferably the axle 24d extends between transverse member 16 and a bolt-
17 mounting bracket 24e spaced therefrom. The axle 24d can also form an anchor 22
18 for engaging the stud 12 during use.

19 Installation of this embodiment is similar to that discussed for the
20 preferred embodiment above. A single bracket 10 may be installed on a vertical
21 member (not shown for clarity of tab 18b) and can be used to support a coil of
22 plastic plumbing or water line (not shown). Alternatively, and referring to Fig. 7b, a
23 pair of brackets 10 of this embodiment may be installed on a single vertical member

1 12 as illustrated, and an object such as a length of plastic water line (not shown)
2 may be spooled across both brackets 10 so as to create a coil of water line.

3 Referring to Fig. 8 and similar to Fig. 6b, a reel 30 is supported on
4 support member 24. A pair of brackets 10 are installed on spaced apart vertical
5 members 12, which may be immediately adjacent, and a rod 11a extends
6 therebetween for support by both brackets 10.

7 Referring to Fig. 9, a pair of brackets 10 of this embodiment are
8 installed on spaced apart vertical members 12 and a work surface 40 extends
9 therebetween for support by both brackets 10.

1 **THE EMBODIMENTS OF THE INVENTION IN WHICH AN**
2 **EXCLUSIVE PROPERTY OR PRIVILEGE IS BEING CLAIMED ARE DEFINED AS**
3 **FOLLOWS:**

4

5 10. A load supporting bracket adapted for attaching to a
6 substantially vertical member having a depth defined by front face and a back face,
7 comprising:

8 a side member having front and rear ends;

9 a front leg and a rear leg co-protruding from the front and rear ends of
10 the side member respectively and forming a first opening greater than the depth of
11 the vertical member therebetween; and

12 a support member extending from the front end of the side member
13 and adapted for supporting a load, the bracket having an installation position
14 wherein the first opening is oriented for installation laterally onto the vertical
15 member and the bracket having an supporting position wherein the bracket is
16 rotated to lower the support member until the front leg engages the front face of the
17 vertical member and the rear leg engages the rear face of the vertical member.

18

1 11. The support bracket of claim 10 wherein the front and rear legs
2 are L-shaped, each of the front and rear legs further comprising:

3 a transverse member protruding substantially perpendicular from the
4 side member; and

5 a tab projecting substantially perpendicular from the transverse
6 member and over the first opening, the tabs having a limited length so to form a
7 second opening therebetween which is greater than the depth of the vertical
8 member and which has a lesser extent than the first opening so that

9 in the installation position, the second opening is oriented for
10 installation laterally onto the vertical member and

11 in the supporting position and the front leg and rear legs engage
12 vertical member, the tabs partially envelope the vertical member.

13

14 12. The support bracket of claim 10, further comprising:

15 anchors extending towards the first opening from at least one of the
16 front leg or the rear leg for engaging the vertical member in the supporting position
17 and substantially precluding relative movement of the bracket and vertical member
18 when the support member is loaded.

19

20 13. The support bracket of claim 12 wherein the anchor comprises
21 one or more teeth.

22

1 14. The support bracket of claim 10 wherein the support member is
2 a hook.

3

4 15. A system implementing the support bracket of claim 10 further
5 comprising:

6 two brackets adapted for attaching to two spaced apart and
7 substantially parallel vertical members;

8 an axle adapted for extending between the support members of each
9 bracket; and

10 a material reel rollably mounted on the axle for ease of dispensing of
11 the material.

12

13 16. A system implementing the support bracket of claim 10 further
14 comprising:

15 two brackets adapted for attaching to two spaced apart and
16 substantially parallel vertical members;

17 a work surface extending between the support members of each
18 bracket.

19

20 17. The support bracket of claim 10 wherein the support member
21 further comprises a plurality of rollers for forming a substantially frictionless support
22 surface for a load movable in a direction transverse to the side member.

23

1 18. A system implementing the support bracket of claim 17 further
2 comprising:
3 a coil of materials; and
4 two brackets adapted for attaching to two locations spaced apart
5 vertically on the vertical members to support the coil, one with the rollers forming an
6 upward support surface and one with the rollers forming an downward support
7 surface.